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10/769,372	01/29/2004	Shunichi Kunihiro	1232-5265	7904

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EXAMINER

FIDLER, SHELBY LEE

ART UNIT PAPER NUMBER

2861

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/769,372

Applicant(s)

KUNIHIRO, SHUNICHI

Examiner

Shelby Fidler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/22/2006</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Information Disclosure Statement*

The information disclosure statement (IDS) submitted on 3/22/2006 was considered by the examiner.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Otsuki et al. (US 6267519 B1).

Otsuki et al. teach the following:

**\*regarding claim 1**, a printing apparatus (col. 5, line 30) performing printing by scanning a carriage (col. 5, lines 34-35) being capable of mounting an inkjet printhead for discharging ink (col. 5, lines 37-38), comprising:

correction means for performing correction of printing timing for adjusting a printing position in the printing (deviation correction section 210, Figure 25); and

non-volatile storage means (P-ROM, col. 16, line 61) for storing information on whether the correction has been already performed or not, wherein the information is obtained when the correction is executed (col. 16, line 64 – col. 17, line 3 in combination with col. 8, lines 49-50

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shows that adjustment values are stored in the storage means, the existence of which proves whether or not the correction has been performed or not)

**\*regarding claim 2**, the information includes a correction value for discharge timing of ink (col. 17, lines 7-10)

**\*regarding claim 3**, the printing apparatus performs printing by bi-directional scanning (col. 1, lines 53-56), and the correction means corrects the printing timing for scanning in a forward direction and the printing timing for scanning in a backward direction (col. 21, lines 45-53)

**\*regarding claim 10**, the information indicates whether the correction by the correction means has been executed before performing the printing (e.g. col. 8, lines 44-51 shows that the relative correction value is set - and thus the correction has been executed - before printing by the user)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuki et al. (US 6267519 B1) in view of Noyes et al. (US 6775022 B2).

**Otsuki et al. teach the following:**

**\*regarding claim 4**, a printing system including a printing apparatus (col. 5, line 30) and a host device connected to the printing apparatus (col. 5, lines 42-43), the printing apparatus performing printing by scanning a carriage mounting a printhead (col. 5, lines 33-38), wherein the printing apparatus comprising:

correction means for performing correction of printing timing for adjusting a printing position in the printing (deviation correction section 210, Figure 25); and

non-volatile storage means (P-ROM, col. 16, line 61) for storing information on whether the correction has been already performed or not, wherein the information is obtained when the correction is executed (col. 16, line 64 – col. 17, line 3 in combination with col. 8, lines 49-50), and the host device comprising:

communication means for receiving the information stored in the storage means by communicating with the printing apparatus (connector 56 provides interface with printer control circuit 40 and computer, Figure 1)

**\*regarding claim 5 and 8**, the information includes a correction value for discharge timing of ink (col. 16, lines 61-64)

**\*regarding claim 6 and 9**, the printing apparatus performs printing by bi-directional scanning (col. 1, lines 53-56), and the correction means corrects the printing timing for scanning in a forward direction and the printing for scanning in a backward direction (col. 21, lines 45-53)

**\*regarding claim 7**, a control method of a printing apparatus for performing printing by scanning a carriage (col. 5, lines 34-35) being capable of mounting a printhead (col. 5, lines 37-38), comprising the steps of:

providing the printing apparatus with correction means for performing correction of printing timing for adjusting a printing position in the printing (deviation correction section

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210, Figure 25), and non-volatile storage means (P-ROM, col. 16, line 61) for storing information on whether the correction has been already performed or not, wherein the information is obtained when the correction is executed (col. 16, line 64 – col. 17, line 3 in combination with col. 8, lines 49-50); and

receiving the information stored in the storage means by communicating with the printing apparatus on a host device connected to the printing apparatus (col. 5, lines 42-43)

**\*regarding claims 11 and 12**, the information indicates whether the correction by the correction means has been executed before performing the printing (e.g. col. 8, lines 44-51 shows that the relative correction value is set – and thus the correction has been executed – before printing by the user)

**Otsuki et al. does not expressly teach the following:**

**\*regarding claim 4**, determination means for determining whether the correction has been performed or not, based on the received information; and

display means for displaying a message when the determination means determines that the correction has not been performed

**\*regarding claim 7**, determining whether the correction has been already performed or not, based on the received information on the host device; and

displaying a warning message on the host device, when it is determined that the correction has not been performed

**\*regarding claims 13 and 14**, the printing apparatus performs the printing immediately after the determination step determines that the correction has been performed

**Noyes et al. teach the following:**

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**\*regarding claim 4**, determination means for determining whether the correction has been performed or not, based on the received information (col. 55, lines 65-67); and

display means for displaying a message when the determination means determines that the correction has not been performed (col. 55, lines 34-37)

**\*regarding claim 7**, determining whether the correction has been already performed or not (col. 55, lines 34-36) based on the received information on the host device (col. 24, lines 27-30 show that printer driver 84 is on the host); and

displaying a warning message on the host device, when it is determined that the correction has not been performed (col. 55, lines 36-37)

**\*regarding claims 13 and 14**, the printing apparatus performs the printing immediately after the determination step determines that the correction has been performed (col. 56, lines 9-13)

At the time of invention, it would have been obvious to a person of ordinary skill in the art to utilize a display means in Otsuki's invention. The motivation for doing so, as taught by Noyes et al., is to notify the user of misalignment and request that alignment be performed (col. 56, lines 26-29).

### *Response to Arguments*

Applicant's arguments filed 3/22/2006 have been fully considered but they are not persuasive. In response to the argument that Otsuki (US 6267519 B1) does not teach that the information designating if the correction processing has been done or not is stored in a non-volatile memory, col. 16, lines 64-66 of Otsuki '519 shows that adjustment numbers are stored in storage areas 202, whereas col. 16, lines 61-64 show that those storage areas 202 are located in a

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non-volatile memory, P-ROM. Both Otsuki '519 and the present application disclose that the adjustment numbers themselves designate if the correction processing has been done or not.

In response to the argument that Otsuki '519 does not teach that the existence of the adjustment values controls the operation of the printer, col. 17, lines 7-13 shows that the printing timing signals correspond to an adjustment value; therefore, the existence of the adjustment values control the operation of the printer.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



*Communication with the USPTO*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelby Fidler whose telephone number is (571) 272-8455. The examiner can normally be reached on MWF 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on (571) 272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*SLF* 6/12/06

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